UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/078,469	05/14/1998	YASUSHI TAKAHASHI	450100-4487	7293

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EXAMINER
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ART UNIT	PAPER NUMBER
2611	

DATE MAILED: 01/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/078,469	TAKAHASHI ET AL.
	Examiner	Art Unit
	Son P Huynh	2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>03</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01 July 2003</u> .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-5,7,9-11,13 and 17-28* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-5,7,9-11,13 and 17-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☒ The proposed drawing correction filed on <u>13 June 2002</u> is: a)☒ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

Response to Arguments

1.   The indicated allowability of claims 1, 3-5, 7, 9-11, 13, 17-20 is withdrawn in view of the newly discovered references to Herz, Robinson. Rejections of claims 1, 3-5, 7, 9-11, 13, 17-28 are shown below.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3.   Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation "the genre" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set
forth in section 102 of this title, if the differences between the subject matter sought to be patented and
the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 1, 3-5, 7, 9-11, 13, 17-20 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Herz et al. (US 6,088,722) and in view of Robinson (US 5,790,426).

Regarding claim 1, Herz discloses a method for accessing to video programs and other

data using customer profiles comprising the steps of:

forming a specific user's own specific user model based on general user selection taste

data comprising classification items and information contents on the basis of a general

user group classified according to a user attributer and/ or the state of information

utilization, and based on the basis information selection taste data of the specific user

(see col. 14, lines 1- 49);

registering specific user model formed for each of plural users so as to correspond to

respective users;

retrieving the information suiting one or more specific user model (s) based on the one

or more specific user model (s) among a plurality of specific user models (col. 25, line

45 – col. 27, line 38; col. 48, lines 18-25 and col. 52, line 40 – col. 53, line 30); and

forming a group user model (clustering customer profiles) on the basis of the plurality of

specific user models and retrieving information based on the group user model (see col.

5, lines 40-59). Herz further discloses W_{ik} is customer i's weight of characteristic k (see

col. 6, lines 9-10; col. 35, line 5 – col. 36, line 23 and col. 38, line 65 – col. 41, line 5).

However, Herz does not explicitly disclose the group user model is formed by a maximum value mode, minimum value mode or average value mode for selecting the maximum value, minimum value or average value, respectively, of the plurality of specific models.

Robinson teaches a group user mode is formed by a user selectable maximum value mode for selecting the maximum value for indicating subscriber taste of television program (user uses keyboard, touch screen or other means to input rating data between zero to four stars or 1 to 5 - see col. 3, line 62-col. 4, line 6; col. 6, line 59+). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz to use the teaching as taught by Robinson in order to provide most interested programs to user.

Regarding claim 3, Herz teaches the methods as discussed in the rejection of claim 1 further comprising the steps of storing the group user model set-top multimedia terminal (see col. 26, lines 2-5 and col. 48, line 18-25). Herz further discloses on display guide 914, recommended programming (based on user profile) is highlighted in an obvious manner or reordered for the customer's perusal and selection of the desired programming (col. 47, line 13+). Necessarily, Herz teaches displaying a program menu at the end user equipment in a prioritized format according to the user model according with a request from a user to retrieve the program menu.

Regarding claim 4, Herz in view of Robinson teaches a method as discussed in the

rejection of claim 1. Robinson further teaches wherein when the maximum value mode

is selected, a genre having the highest degree of taste is continually selected from

among a plurality of genres constituting the group user model and liked by each specific

user of the group (see col. 6, line 60+).

Regarding claim 5, Herz in view of Robinson teaches a method as discussed in the

rejection of claim 1. Robinson further teaches wherein when the minimum value mode is

selected, at least the genre having the lowest degree of taste is continually selected

from among the genres constituting the group user model and liked by each specific

user of the group (rating zero star or 1 see col. 6, line 60+).

Regarding claims 7, 9-11, the apparatus elements being claimed correspond to the

method elements of claims 1, 3-5 and analyzed as discussed with respect to claims 1,

3-5.

Regarding claim 13, Herz discloses a method for accessing to video programs and

other data using customer profiles comprising the steps of:

forming a specific user model for a specific user based at least upon the specific user's

own selection data (see col. 14, lines 1- 49);

registering the specific user model formed for each of plural users, whereby a plurality

of specific user models are registered and correspond to respective users;

forming a group user model (clustering customer profiles) on the basis of the plurality of

specific user models and retrieving information based on the group user model (see col.

5, lines 40-59). Herz further discloses W_{ik} is customer i's weight of characteristic k (see

col. 6, lines 9-10; col. 35, line 5 – col. 36, line 23 and col. 38, line 65 – col. 41, line 5).

However, Herz fails to disclose group user model is formed by a maximum value mode,

minimum value mode or average value mode for selecting the maximum value,

minimum value or average value, respectively, of the plurality of specific models.

However, Herz does not explicitly disclose the group user model is formed by a

maximum value mode, minimum value mode or average value mode for selecting the

maximum value, minimum value or average value, respectively, of the plurality of

specific models.

Robinson teaches a group user mode is formed by a user selectable maximum value

mode for selecting the maximum value for indicating subscriber taste of television

program (user uses keyboard, touch screen or other means to input rating data between

zero to four stars or 1 to 5 - see col. 3, line 62-col. 4, line 6; col. 6, line 59+). Therefore,

it would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify Herz to use the teaching as taught by Robinson in order to provide

most interested programs to user.

Regarding claim 17, Herz in view of Robinson teaches a method as discussed in the

rejection of claim 1. Herz teaches the group user model is formed exclusively on the

basis of a plurality of specific user models formed for users of a common end user

equipment of a household (see col. 35, line 5+).

Regarding claim 18, Herz in view of Robinson teaches a method as discussed in the

rejection of claim 17. Herz further teaches common end user equipment is television

equipment (see figure 10 and col. 42, line 42+).

Regarding claim 19, Herz in view of Robinson teaches a method as discussed in the

rejection of claim 3. Herz further teaches the program menu is guide 914. However,

neither Herz nor Robinson specifically discloses an EPG. Official Notice is taken that

displaying EPG at the end user equipment with genre priority order is well known in the

art. Therefore, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to modify Herz and Robinson to use the well-known teaching in

the art in order to allow user to quickly locate desired program to select.

Regarding claim 20, Herz in view of Robinson teaches a method as discussed in the

rejection of claim 3. Herz further discloses highlighting recommended program on

display guide 194 (see col. 47, line 15+). However, neither Herz nor Robinson

specifically discloses an EPG. Official Notice is taken that displaying EPG at the end

user equipment is well known in the art. Therefore, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to modify Herz and Robinson

to use the well-known teaching in the art in order to provide information to user in

advance thereby allow user to select desired program based on the information provide

on EPG.

6.   Claims 21-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over

.Bergh et al. (US 6,112,186) and in view of Hendricks et al. (US 5,798,785).

Regarding claim 21, Bergh teaches a method wherein the user name, address, age are

stored in user profile, In addition, the user profile stores information about the rating,

such as time and data the user entered the rating for the item. Then in response user

rating information in user profiles, generating a user's neighbor set based on similarity

factor between the rating users; Once a set of neighboring users is chosen, a weight is

assigned to each of the neighboring users based on confident factor of each user; the

user's neighboring user set also be updated each time that a new rating is entered by

user (see figures 1 and 3). Bergh also teaches providing the user with a particular set of

items to rate corresponding to a particular group of items. Group are genres of items

(see col. 4, lines 15-52); Furthermore, Bergh teaches a list of items is recommended to

user and displayed on the screen using user information in neighbor set (see col. 13,

line 55+). Bergh also discloses user use keyboard, touch screen to input rating

information from A-F or 1-5 for items and using the rating information to form a neighbor

set (see col. 4, line 33+). Inherently, the method comprising:

enabling each user of a group of users of common end user equipment to input video

program preference data;

processing the inputted program preference data to create a specific user model for

each user in the group;

forming a group user model (neighbor set) on the basis of the plurality of specific user

models;

storing the formed group user model in a group user's preference database;

receiving group of items and determining which items to provide to specific neighbor set

based on user information in neighbor set; selecting via a user interface, a program

from the displayed list for viewing.

wherein the group user model (neighbor set) is formed by a user selectable maximum

value mode, minimum value mode or average value mode in which an end user selects

between a maximum value, minimum value, or average value, respectively, of the

plurality of specific user models (user selects A-F or 1-5 to rate an item).

However, Bergh does not specifically disclose receiving program guide information;

generating a display signal representing a prioritized screen which includes a list of the

determined programs;

Hendricks teaches receiving program guide information; determining program that is

interested by user based on user preferences; generating a display signal representing

a prioritized screen which includes a list of the determined programs; selecting, via a

user interface, a program from the displayed list for viewing (see col. 2, lines 7-65; col.

30, line 3-col. 33, line 13; col. 33, line 58-col. 34, line 19). Therefore, it would have been

obvious to one of ordinary skill in the art at the time the invention was made to modify

Bergh to use the teaching as taught by Hendricks in order to provides the most desired programs to users thereby increase efficiency in service.

Regarding claim 22, Bergh teach the group user model is formed on the basis of the plurality of specific use models formed for users of the common end user equipment of a household (see figures 1-3).

Regarding claim 23, Bergh in view of Hendricks teaches a method as discussed in the rejection of claim 21. Hendricks further discloses programs suggested from the program abstract search can then be prioritized and either displayed in prioritized order or further refined by deleting programs not satisfying a minimum weight threshold thereby reducing the list of suggested programs displayed to the viewer. The refined list is then displayed to the viewer (see col. 33, lines 7-13; col. 36, lines 29-67; col. 38, lines 7-15). Inherently, the prioritized screen contains information of an electronic program guide (EPG), the information being displayed prioritized via rearrangement of menu contents of the EPG in accordance with a genre priority order according to the group user model.

Regarding claim 24, Bergh in view of Hendricks teaches a method as discussed in the rejection of claim 21. Hendricks further discloses programs suggested from the program abstract search can then be prioritized and either displayed in prioritized order or further refined by deleting programs not satisfying a minimum weight threshold thereby reducing the list of suggested programs displayed to the viewer. The refined list is then

displayed to the viewer (see col. 33, lines 7-13; col. 36, lines 29-67; col. 38, lines 7-15).

Inherently, the prioritized screen contains information of an electronic program guide

(EPG).

In addition, Bergh discloses information about the recommended items can be

displayed to user such as "highly recommended" or "highly recommended-85%" or it

may display "highly recommended-very sure" (see col. 14, lines 12-37). It is obvious that

information being displayed prioritized via displayed of selected menu content of the

EPG in a differentiating manner with respect to displayed non-selected menu contents

on the screen in order to allow user to recognize the selected items and non-selected

items, thereby it helps user to select a desired program easily.

Regarding claims 25-28, the limitations of the system as claimed correspond to the

limitations of the method as claimed in claims 21-24 and are analyzed as discussed with

respect to the rejection of claims 21-24.

Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Jacobi et al. (US 6,064,980) teaches system and method for collaborative

recommendations.

Jain et al. (US 5,842,010) teaches periodic wireless data broadcast.

Robinson (US 5,884,282) teaches automated collaborative filtering system.

Hiroshi (JP 408077184A) teaches device and method for evaluating customer.

8.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Son P Huynh whose telephone number is 703-305-

1889. The examiner can normally be reached on 8:00-5:30.

9.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone numbers for

the organization where this application or proceeding is assigned are 703-872-9314 for

regular communications and 703-872-9314 for After Final communications.

10.   Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the customer service office whose telephone number

is 703-306-0377.

Son P. Huynh
December 4, 2003

ANDREW FAILE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600